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17 *Attorneys for Defendants*

18   UNITED STATES DISTRICT COURT

19   NORTHERN DISTRICT OF CALIFORNIA

                        SAN FRANCISCO DIVISION
20

21 REARDEN LLC et al.,	Case Nos. 3:17-cv-04006-JST
Plaintiffs,	3:17-cv-04191-JST
22 vs.	**NOTICE OF MOTIONS AND MOTIONS**
23 THE WALT DISNEY COMPANY et al.,	**FOR SUMMARY JUDGMENT ON** **CAUSAL NEXUS ISSUE**
Defendants,	
24 REARDEN LLC et al.,	
Plaintiffs,	Judge: Hon. Jon S. Tigar
25	Date: To be set
vs.	Time: To be set
26 TWENTIETH CENTURY FOX FILM	Ctrm.: 9 (19th Floor)
27 CORPORATION et al.,	
28 Defendants.	

1

NOTICE OF MOTIONS AND MOTIONS TO DISMISS

2   To Plaintiffs Rearden LLC and Rearden MOVA LLC ("Rearden") and their counsel of

3   record:

4   PLEASE TAKE NOTICE that on a date to be scheduled by further Court Order, or as soon

5   thereafter as the matter may be heard, in Courtroom No. 9 of the above-captioned Court, located at

6   450 Golden Gate Avenue, San Francisco, CA 94102, all defendants in Case No.

7   3:17-cv-04006-JST (The Walt Disney Company, Walt Disney Motion Pictures Group, Inc., Buena

8   Vista Home Entertainment, Inc., Marvel Studios, LLC, and Mandeville Films, Inc.) (collectively,

9   "Disney"), and both defendants in Case No. 3:17-cv-04191-JST (Twentieth Century Fox Film

10 Corporation and Twentieth Century Fox Home Entertainment LLC) (jointly, "Fox") (Disney and

11 Fox are referred to collectively as "Defendants" or "Studios"), will and hereby do move the Court

12 for an Order granting Defendants partial summary judgment on Rearden's First and Second

13 Causes of Action against Disney, and Rearden's First Cause of Action against Fox. Specifically,

14 Defendants move for an Order holding that Rearden may not obtain as damages under 17 U.S.C.

15 § 504(b) any portion of the Studios' profits from the at-issue motion pictures (the "Motion

16 Pictures" or "Movies")—so-called "indirect profits"—on the ground that Rearden as a matter of

17 law cannot establish a causal nexus between the alleged copyright infringement and those profits.

18   These Motions are based upon these Notices of Motions and Motions; the attached

19 Memorandum of Points and Authorities[1]; the contemporaneously filed Declarations of Vincent

20 Cirelli, Joe Conmy, Danielle Costa, Todd Isroelit, Gregory LaSalle, Patrick Ledda, Hao Li, Mike

21 Mulvihill, Erik Nash, Jonathan Rothbart, Mimi Steele, and Teresa Reed Dippo; all other materials

22 supporting these Motions and the Reply brief filed or manually lodged in support thereof; all

23 pleadings on file in this matter; and any other materials or arguments the Court may receive at or

24 before the hearing on these Motions.

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[1] Defined terms in these Notices of Motions and Motions (e.g., "Rearden" or "Studios") are also
used in the accompanying Memorandum of Points and Authorities.

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2   DATED: February 28, 2019   MUNGER, TOLLES & OLSON LLP

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4
                                               By: */s/ Ginger D. Anders*
5   GINGER D. ANDERS

6   *Attorneys for Defendants*

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INTRODUCTION

Rearden has the substantial burden of establishing with non-speculative evidence a causal nexus between the alleged infringement (the copying of MOVA code into computer random access memory ("RAM")) and revenues the Studios earned from the Motion Pictures. Countless components contribute to the production of a major motion picture like those at issue here, and many factors influence the decisions of consumers to see it. It is difficult to imagine any plaintiff establishing a causal nexus between a software tool used behind the scenes in the motion picture production process and motion picture revenue sufficient to entitle the plaintiff to an award of indirect profits. Rearden cannot do so here and its remedy, if any, is not a portion of a Motion Picture's profits but the recovery of lost revenue—most accurately measured by what Rearden charged customers for MOVA services or vendors for a license—or statutory damages under 17 U.S.C. § 504(c).

Rearden does not allege that the Motion Pictures infringe Rearden's copyright. Rearden instead alleges only a narrow infringing act: Copying by Digital Domain 3.0 ("DD3") of pieces of the MOVA software code into RAM while recording facial performances and processing recorded data into "output files." Neither the temporary copies of code nor the output files appeared in any Motion Picture or were ever visible to consumers. Rearden cannot show that the copies of code, which are temporary mechanical byproducts of the software's use, caused consumers to choose to see the motion pictures. Even the *use* of the software itself, which is not the alleged infringement and which is a process in which Rearden has no copyright interest, has an attenuated connection to the final character and no causal nexus to the Motion Picture revenues.

Nonetheless, Rearden attempts to create the impression that MOVA made a significant contribution to the completed Movies by including in its Amended Complaint images of final computer-generated ("CG") faces, as if MOVA software directly created final characters and therefore must bear a causal relationship to Movie revenues. Rearden greatly overstates the involvement of MOVA software in the process of creating a CG character. MOVA is not responsible for the onscreen appearance of the CG character, which is developed through hundreds—if not thousands—of hours of work by a team of graphic artists. MOVA software is

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1 involved only with geometric aspects of the CG character's facial movements. And even then,

2 other software is required to port the facial movements to the CG model and graphic artists must

3 invest hundreds of hours in revising those movements to better match the CG character. The

4 MOVA software's output—in which Rearden has no copyright interest—is simply data that tracks

5 movement in three dimensions. The output has more in common with a calculus problem than an

6 onscreen CG character.

7   Innumerable pieces of equipment and types of technologies and software tools were used

8 to make the Motion Pictures, along with countless hours of human involvement in front of and

9 behind the camera. MOVA was just one of many behind-the-scenes tools that played one small

10 part in the enormously complicated process of making major motion pictures.

11   Rearden, however, claims it can meet its burden because articles and other publications

12 about some of the Motion Pictures referred to "MOVA." But the statements Rearden cites are

13 general references to the facial motion capture process—not just MOVA—and they do not

14 attribute consumer choices or a Motion Picture's revenues to MOVA.

15   Finally, Rearden's request for damages based on the "use" of the MOVA software

16 confuses liability under patent law with copyright law.[1] It is not the "use" of the MOVA software

17 that is alleged to infringe, just the incidental copying of a portion of the software code through a

18 routine computer operation. Had Rearden maintained and proved its patent claims, rather than

19 dismissing them,[2] Rearden might have been able to seek damages based on the use of the software.

20 But Rearden's remedies under patent law would not include claims to Motion Picture profits.

21 Instead, damages would be limited to a reasonable royalty or perhaps amounts saved by DD3's

22 use of MOVA relative to the use of another software tool or using no facial motion capture

23 technology at all—which is presumably the reason Rearden dismissed its patent claims.

24   The Ninth Circuit has said that eliminating meritless indirect profits claims "'obviates a

25 good deal of mischief.'" *Polar Bear Prods., Inc. v. Timex Corp.*, 384 F.3d 700, 711 (9th Cir.

26

27 [1] Patent law provides liability for the unauthorized making, *using,* or selling of a product or
   process covered by the claim(s) of a patent. 35 U.S.C. § 154(a)(1) .
28 [2] Dkt. 93 (No. 17-cv-04006).

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1   2004) (quoting 4 Nimmer on Copyright § 14.03[B], at 14–39)). Rearden's indirect profits claim—

2   seeking to recover profits from a motion picture based on a claim of secondary liability arising out

3   of a third-party vendor's use of behind-the-scenes software—is mischief in the extreme. The

4   Court should dismiss Rearden's damages claim.

5   **BACKGROUND**

6   **I.   THE LEGAL FRAMEWORK FOR REARDEN'S INDIRECT PROFITS CLAIM**

7   Section 504(b) of the Copyright Act authorizes the recovery of actual damages or "profits

8   of the infringer that are attributable to the infringement." 17 U.S.C. § 504(b). The law recognizes

9   two types of profit claims. Direct profits come from the sale of the infringing copy. *Mackie v.*

10 *Reiser*, 296 F.3d 909, 914 (9th Cir. 2002). Here, direct profits would be (at most) the amounts that

11 DD3 invoiced for using MOVA. DD3's invoices (including out of pocket costs) were for sums

12 that would not justify the expense of this litigation.[3]

13   Rearden therefore seeks "indirect profits," i.e., "revenue that has a more attenuated nexus

14 to the infringement." *Mackie*, 296 F.3d at 914. The alleged infringing act is the creation of an

15 unauthorized copy of MOVA software code that temporarily resided in computers that third-party

16 vendor DD3 operated. Based on that act—which took place early in the production process,

17 before armies of visual effects artists, engineers, and others crafted the character and performance

18 that eventually appeared on screen—Rearden seeks a portion of the profits made by the finished

19 motion pictures.

20   Mindful that the indirect profits remedy incentivizes plaintiffs to "shoot the moon," courts

21 have adopted gating requirements for such claims. It is "particularly important for the plaintiff in

22 [an] indirect profit action to demonstrate the alleged causal link between the infringement and the

23 profits sought." *Polar Bear Prods.*, 384 F.3d at 711 n.7. Ninth Circuit law is clear on what that

24 entails:

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27 [3] *See* Steele Decl. ¶ 5; Costa Decl. ¶¶ 4–5; LaSalle Decl. ¶ 8; Conmy Decl. ¶ 5; *see also* Costa

28 Decl. ¶ 6 (listing amount for visual effects provided by entity Rearden allegedly controlled for
    motion picture produced in 2012); Isroelit Decl. ¶ 4 (same for motion picture produced in 2009).

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> To survive summary judgment on a demand for indirect profits pursuant to
> § 504(b), a copyright holder must proffer sufficient non-speculative evidence to
> support a causal relationship between the infringement and the profits generated
> indirectly from such an infringement.

Mackie, 296 F.3d at 915–16.

That burden is significant. The plaintiff must show, through concrete evidence, that the infringement increased the revenue earned by the infringer. *Id*. at 911 (requiring "a link between the infringement and the [defendant's] supposedly enhanced revenues"); *Dash v. Mayweather*, 731 F.3d 303, 332 & n.18 (4th Cir. 2013) (reasoning that plaintiff's claim could not survive summary judgment because plaintiff had "no evidence that the playing of the [infringing] song … increased any of [defendant's] revenue streams").

A plaintiff's indirect profits theory is amenable to testing on summary judgment. Indeed, because the causation inquiry is rigorous and claims to indirect profits are often attenuated, such claims often do not survive summary judgment. 4 Nimmer on Copyright § 14.03[B][2][b], at p. 14 (such claims "are more frequently unsuccessful"). The Ninth Circuit, district courts within the Circuit, and other courts have granted summary judgment as a matter of law on indirect profits claims on the ground that the plaintiff is unable to proffer non-speculative evidence that the infringement increased revenues.[4]

The Ninth Circuit's decision in *Mackie* demonstrates why Rearden's claim cannot survive summary judgment. In *Mackie*, the district court rejected plaintiff's claim for indirect profits after the defendant made an infringing copy of plaintiff's artwork and used it on one page of a 24-page promotional brochure mailed to 150,000 potential ticket buyers of the Seattle Symphony. The page with the infringing artwork directly followed a page containing information about an

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[4] *See, e.g.*, *Mackie*, 296 F.3d 909 (affirming grant of summary judgment where evidence of causation was speculative); *Dash*, 731 F.3d at 332 & n.18 (affirming grant of summary judgment where plaintiff had "no evidence that the playing of the [infringing] song … increased any of [defendant's] revenue streams"); *Bouchat v. Baltimore Ravens Football Club, Inc.*, 346 F.3d 514, 520 (4th Cir. 2003) (affirming grant of summary judgment where plaintiff offered only speculation that use of infringing logo caused increased merchandise sales); *Thale v. Apple, Inc.*, No. C-11-03778-YGR, 2013 WL 3245170, at *7–*9 (N.D. Cal. June 26, 2013) (granting summary judgment where plaintiff "proffered no evidence that the use of the [infringing] Photo caused any iPhone 3GS sales, nor that the "Concert" commercial did itself"); *New Show Studios, LLC v. Needle*, No. 2:14-cv-01250-CAS (MRWx), 2016 WL 5213903, at *9 (C.D. Cal. Sept. 20, 2016)

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1 upcoming performance series called "Pops." The plaintiff artist sought a share of the Seattle

2 Symphony's profits from the Pops series based on the inclusion of his artwork to advertise the

3 Pops series.

4 The Ninth Circuit affirmed the grant of summary judgment on plaintiff's indirect profits

5 claim because there were "virtually endless" reasons that people might purchase tickets to the

6 Pops series: "For example, was it because of the Symphony's reputation, or the conductor, or a

7 specific musician, or the dates of the concerts, or the new symphony hall, or the program, or the

8 featured composers, or community boosterism, or simply a love of music, or ... ?" *Mackie*, 296

9 F.3d at 916. The plaintiff's expert asserted that some people likely bought tickets as the result of

10 seeing the infringing artwork. The Ninth Circuit rejected this claim as a matter of law for the

11 fundamental reason that there are numerous reasons why people would buy Symphony tickets:

12 "In the absence of concrete evidence, [plaintiff's] theory is no less speculative than our effort … to

13 enumerate even a relatively short list of the myriad factors that could influence an individual's

14 purchasing decisions." *Id.*

15 The causal link between infringement and revenues in *Mackie* was closer than that Rearden

16 attempts to establish here. While in *Mackie* consumers at least saw the artwork in issue in the

17 Symphony's promotional brochure, consumers who paid to see the Motion Pictures saw neither

18 the copied MOVA code nor any file that the code might have generated. As in *Mackie*, the

19 number of factors here influencing a moviegoer's decision to purchase a ticket are so varied that

20 any attenuated link to MOVA would be pure speculation. Rearden's claim for indirect profits

21 cannot survive summary judgment.

22 **II.   FACTUAL BACKGROUND**

23 Rearden's complaints vastly overstate MOVA's role, reprinting images from its marketing

24 materials to make it appear that going from the performance capture, to the tracked mesh, to a

25 completed CG character proceeds 1-2-3.[5] The reality is that the special effects process of creating

26

27 (granting summary judgment where plaintiff "ha[d] not offered any non-speculative evidence that
the [infringing] videos" included in defendant's advertising portfolio "generated profits").

28 [5] First Amended Complaints ¶ 37(Mar. 6, 2018), Dkt. 63 (No. 17-cv-04006); Dkt. 41 (No. 17-cv-04191).

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a CG character is far more complex, and MOVA software's contribution much less significant, than Rearden suggests.[6]

A.   The First, And Only, Step Involving The Alleged Infringement: Temporary Copies Of MOVA Software Code Are Created In RAM

The alleged copyright infringement is narrow. Specifically, Rearden alleges that when third-party special effects vendor DD3 launched the MOVA system at the start of a motion-capture or data-processing session, pieces of MOVA software code were temporarily copied from the computer's hard drive into the computer's RAM.[7] Other than the temporary copying of the MOVA software code through a routine computer operation, there is no alleged exercise of the exclusive rights of copyright, 17 U.S.C. § 106, and there is nothing more to the alleged infringement.

B.   The Next Steps—Capturing The Facial Performance And Generating The Output Files—Do Not Involve Copying MOVA Software Code And Are Not The Alleged Basis of Liability

The MOVA processes of recording an actor's facial movements and generating data points can take only a few hours. The process of taking the resulting information from the face capture and creating a CG character involves the use of *non*-MOVA software tools and substantial human artistry, and takes thousands of hours over a period of months.[8]

1.   During face capture, the MOVA software code necessary for the relevant software operation resides in RAM. The code provides instructions to the physical machinery (cameras and lights) for the strobing of visible and ultraviolet ("UV") lights and recording and synchronizing the data. The actor, wearing phosphorescent makeup (visible only under UV light), sits or stands in the physical MOVA apparatus and provides the performance. A supervisor directs the actor's facial performance. Li Decl. ¶¶ 13–17.

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[6] The process involved in creating a CG character is described in greater detail in several of the accompanying declarations, including the declaration of Professor Hao Li.

[7] First Amended Complaints (Mar. 6, 2018), Dkt. 63 ¶¶ 99, 107, 115, 129 (No. 17-cv-04006); Dkt. 41 ¶¶ 96, 103, 112, 125 (No. 17-cv-04191).

[8] *See, e.g.*, Li Decl. ¶ 26; Cirelli Decl. ¶ 10; Rothbart Decl. ¶¶ 9–17; LaSalle Decl. ¶ 8; Steele Decl. ¶ 4.

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1   2.   During data processing, the temporary copies of MOVA code again reside in RAM

2 and provide instructions, most notably to assist with generating an output file called the "tracked

3 mesh."   The tracked mesh is a collection of data following the position of various points on the

4 face in three dimensions over time. *Id.* ¶¶ 18–19.

5   The tracked mesh is created by processing other facial motion data called the "point

6 cloud." First, each frame of the actor's performance is translated into a "point cloud." The point

7 cloud is the actor's face represented by thousands of coordinates along three dimensions (x, y, and

8 z axes) in space. Visualized on a computer display, the point cloud appears as a collection of dots

9 arranged in a 3D form covering the major regions of the face. *Id.* ¶ 19.

10   Second, the tracked mesh is produced by processing the point cloud data. MOVA software

11 supplies an algorithm that tracks specific points on the face across time to produce the tracked

12 mesh. The tracked mesh is a collection of data specifying particular 3D coordinates that permit

13 consistent tracking of the motion of the actor's face. If visualized on a computer display, the

14 tracked mesh shows a wireframe outline of a facial mask. The data of the tracked mesh plots

15 points only on the face (not the top or back of the head, including hair, or the ears), and excludes

16 critical regions of the face, such as the teeth, tongue, eyes, skin around the eyes, and part of the

17 lips. *Id.* ¶¶ 19–20. Below are visualizations of the point cloud and tracked mesh data. *Id.* ¶ 19.

time   point cloud   tracked mesh   overlay (point cloud + tracked mesh)

-7-
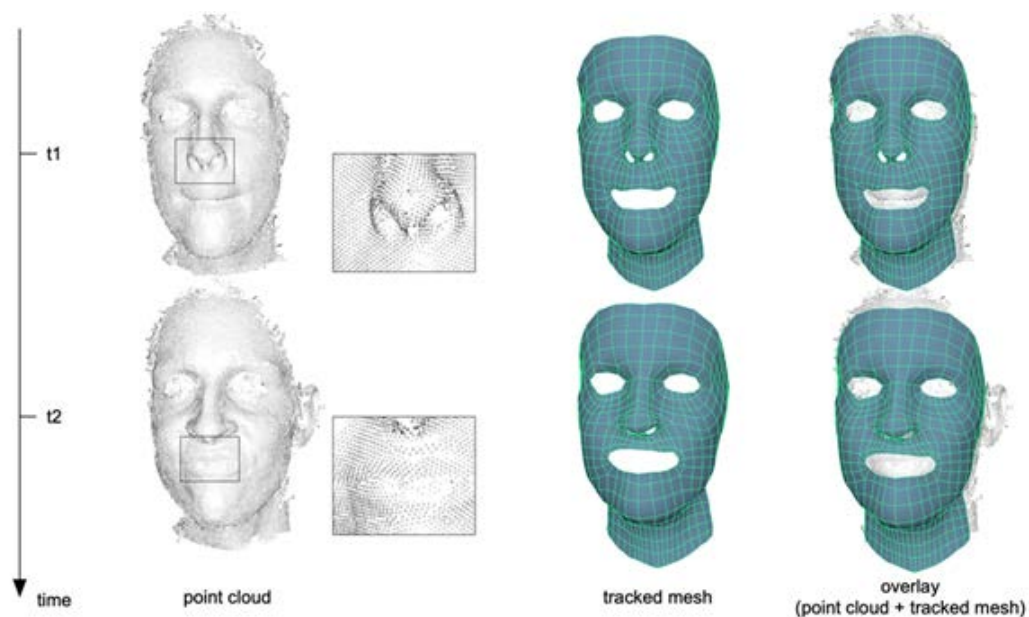
Human involvement goes into the data processing required to create the tracked mesh. Although the MOVA software's algorithm is complex, it is not robust enough to accurately track complex facial movement, and it does not produce a perfectly accurate tracked mesh. Without human intervention to supplement and correct the tracking, the tracked mesh would be unusable. *Id.* ¶ 20c.

The output files from the use of the overall MOVA system (not just the software) are the point cloud, the tracked mesh, and the raw video footage of the actor's performance. The tracked mesh is most relevant to the process of animating a CG character, whereas the video footage and point cloud may be used as reference material. *Id.* ¶ 21. None of these output files is itself an allegedly infringing copy of the MOVA software code, and Rearden has no copyright claim in these output files.[9]

C.   The Next Step—Creating The Facial "Rig"—Does Not Involve Copies Of MOVA Software Code

The tracked mesh is only a set of data points. To create a CG character, digital artists must separately create a 3D animation model of the character's face, to which the data can be applied to help create facial motion. This model, called a "rig," is like a facial puppet that can be manipulated to perform a range of facial expressions. Li Decl. ¶ 21. The rig is typically hand-crafted by animators, with assistance from non-MOVA software, and is imbued with stylistic and artistic choices. *Id.* ¶ 22; *see, e.g.*, Rothbart Decl. ¶ 11. Below are three images of rigs of the character "Thanos" from *Guardians of the Galaxy* and *Avengers: Age of Ultron*: (a) at top, the Thanos rig performing a variety of hand-crafted facial expressions; (b) below and on the left, a close-up Thanos rig with a neutral facial expression; and (c) below and on the right, a close-up Thanos rig with a different facial expression. The appearance of the rig in the images below is the result of non-MOVA artistry and techniques. Cirelli Decl. ¶ 5.

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[9] Dismissal Order at 7–8, Dkt. 60 (No. 17-cv-04006).

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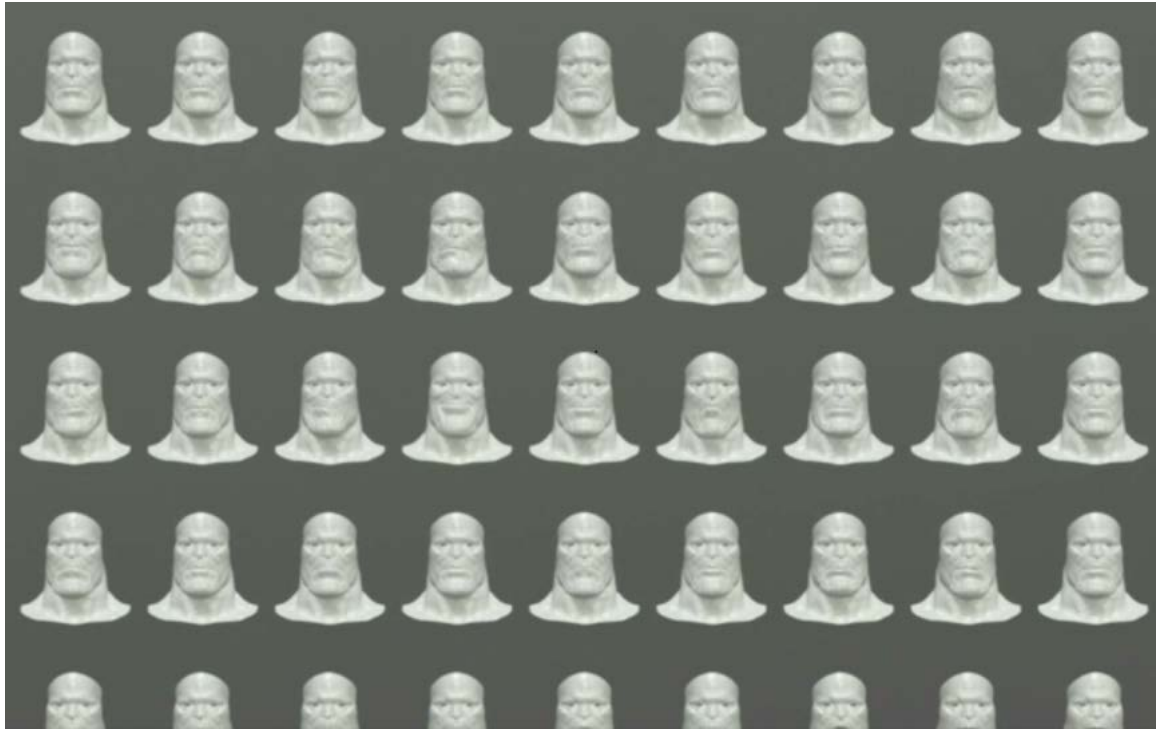
The desired facial performance is then mapped onto the rig in a process that requires additional non-MOVA software, and does not involve copies of MOVA software code. Li Decl. ¶ 24. The tracked mesh supplies data points that reflect the facial *motion* from the actor's performance. But the tracked mesh typically cannot be directly applied to the facial rig because the (frequently inhuman) CG characters are often very differently proportioned from the human actors—Thanos and the Beast being two examples. A one-to-one port would result in unrealistic facial expressions. *See, e.g.*, Cirelli Decl. ¶ 7. Rather, specially designed non-MOVA software is required to translate the coordinates in the tracked mesh to computer parameters that can control

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1 the facial movements of the rig. Li Decl. ¶ 24. DD3 has a proprietary software program, "Direct

2 Drive," which is used for this purpose.[10]

3   Digital artists refine the mapped performance on the facial rig for accuracy and stylistic

4 reasons, such as the director's preference for more exaggeration in the facial expression. Altering

5 the rig's facial expression modifies or overwrites the expression reflected in the tracked mesh. Li

6 Decl. ¶ 25; *see also, e.g.*, Steele Decl. ¶ 4. This further delinks the facial rig from the tracked

7 mesh data that MOVA generates. For any shots that use data from the tracked mesh, animators

8 must add the movement of the eye and lip regions, which are not included in the tracked mesh, to

9 the mapped performance. Li Decl. ¶ 25; Cirelli Decl. ¶ 6; LaSalle Decl. ¶ 5. Moreover, the

10 tracked mesh supplies data only for shots based on the actor's facial performance in the MOVA

11 apparatus. Other shots do not involve MOVA data, such as shots based on manually-created

12 expressions. *See, e.g.*, Cirelli Decl. ¶ 6; Li Decl. ¶ 25.

13   **D.   Innumerable Additional Steps (None Of Which Involve Copies Of The MOVA
              Software Code) Are Required To Create The CG Character**

14

15   The completed facial rig is not the completed CG character. There are still hundreds or

16 even thousands of hours of human labor and artistry that are required to transform the rig into a

    CG character that appears onscreen. These subsequent stages may be broken down into three very
17
    broad categories, none of which involves MOVA software and each of which can take weeks or
18
    months to complete:
19
         •   *Modeling*. The face must be developed with color, texture, shading, hair, and other
20
                   details. A photoreal CG face includes pore-level details, skin tone and color,
21
                   changes in texture (such as wrinkles for particular expressions), and changes in skin
22
                   tone based on emotion (for example, blood flow to the cheeks to depict anger).
23
                   Each detail must be designed through manual artistry or other techniques that do
24
                   not involve the MOVA system and then must be layered onto the facial rig. Li
25

26 _____

27 [10] LaSalle Decl. ¶ 5; Steele Decl. ¶ 3; *see also* Cirelli Decl. ¶¶ 6–7 (special effects studio for
    Guardians of the Galaxy and *Avengers: Age of Ultron* developed proprietary "Face2Face"
28 software for this purpose); Ledda Decl. ¶¶ 4–5 (facial motion data was too different from target
    CG character to warrant creating software script to translate MOVA data to rig).

Decl. ¶ 26a; *see, e.g.*, Steele Decl. ¶ 4. The images below are examples from the

processes of modeling the face of Thanos, specifically (a) layering hand-painted

textures onto Thanos's face using non-MOVA modeling software; and

(b) modeling facial hair onto Thanos's face. Cirelli Decl. ¶ 8a.

- *Animation*. Facial movement must be developed with manual animation for certain

  kinds of movement that cannot be created from the actor's facial performance.

  Examples include movement that results from contact between a face and another

  object (e.g., the punching of a face), or secondary facial motion caused by the

  character's movement (e.g., jiggling when jumping or shaking the head). To

  reproduce this movement, a technical director or animator will use computer

  parameters to simulate the particular movement, essentially employing a trial and

  error process until it "looks right." Once the computer parameters are satisfactory,

  the simulation may still require further refinement based on the artistic preference

  of the production team. Li Decl. ¶ 26b. The following image is a sample from the

  process of refining the movement of Thanos's facial skin by hand. Cirelli Decl.

  ¶ 8b.

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- *Rendering.* The culmination of all the steps described above is a 3D version of the

    character's face, visible only on a computer using appropriate 3D-viewer software. This

    3D version must be converted into a 2D image that can be incorporated into a final motion

    picture through a process called rendering. Rendering combines all of the facial

    components—the shape and motion of the face, the color, the texture, the shading, and

    other attributes. This involves months of effort by an entire team of specialized digital

    artists. The rendering process is extremely complex, requiring, among many other things,

    the incorporation of the realistic reflection of light onto the entire scene. MOVA software

    is not involved in this process. Li Decl. ¶ 26c; *see, e.g.*, Rothbart Decl. ¶¶ 14–16. The

    images below are (a) on the left, a sample from the process of perfecting the light reflected

    on Thanos's face; and (b) on the right, four sample images that show a few of the different

    visualizations of the Thanos face involved in the rendering process. Cirelli Decl. ¶ 8c.

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- The image below shows the final onscreen version of Thanos's face, lacking even a shadow of resemblance to a tracked mesh. Cirelli Decl. ¶ 9.

These undertakings produce only the CG character's face. The character's body does not rely on the facial performance. Technicians conduct a separate full-body capture session, which may require performances by one or more actors or stunt doubles; computer simulations for extreme stunts; the building of body skeletons as models; and the retargeting of the actor's movement to the skeleton of the CG character. The development of the character's voice may also require hours of additional work, including a separate voice performance. Li Decl. ¶ 28; *see also* Rothbart Decl. ¶¶ 4–10.

The work of creating a single CG character is just one small part in completing the overall motion picture. That character must be integrated into the full-length footage, which includes the performances of many actors; a script for all the action and dialogue; the work of hundreds of other creative and technical personnel; elaborate sets, costumes, and music; and the countless other elements that go into creating a movie.[11] The amounts paid for the facial motion-capture process underscore the limited role of the MOVA software in the production process. DD3's invoices for its facial capture services (which encompassed more than just the use of the MOVA

---

[11] Defendants are submitting DVD copies of the completed Motion Pictures. *See* Reed Dippo Decls. (filed with the Movies at issue in the Disney and Fox dockets, respectively).

1 software) constituted a tiny fraction of DD3's overall special effects work, and an even smaller

2 fraction of the overall special effects budgets for the Motion Pictures.[12]

3   **ARGUMENT**

4   Summary judgment is appropriate when a "movant shows that there is no genuine dispute

5 as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P.

6 56(a); *Anderson v. Liberty Lobby, Inc*., 477 U.S. 242, 248–49 (1986). "A dispute is genuine only

7 if there is sufficient evidence for a reasonable trier of fact to resolve the issue in the nonmovant's

8 favor, and a fact is material only if it might affect the outcome of the case." *LivePerson, Inc. v.*

9 *[24]7.ai, Inc*., No. 17-cv-01268-JST, 2018 WL 5849025, at *3 (N.D. Cal. Nov. 7, 2018). Where,

10 as here, the summary judgment motion pertains to "an issue as to which the nonmoving party will

11 have the burden of proof," "the movant can prevail merely by pointing out that there is an absence

12 of evidence to support the nonmoving party's case." *Soremekun v. Thrifty Payless, Inc.*, 509 F.3d

13 978, 984 (9th Cir. 2007). Because Rearden cannot meet its burden of establishing a causal nexus

14 between the alleged infringement and the revenues made on the Motion Pictures, summary

15 judgment is appropriate.

16 **I.   REARDEN CANNOT SATISFY ITS BURDEN TO DEMONSTRATE A CAUSAL**
NEXUS BETWEEN THE INFRINGEMENT AND THE REVENUES FROM THE
17 **MOTION PICTURES**

18   Rearden cannot establish a concrete causal link between third-party vendor DD3's

19 temporary copy of MOVA software code and the revenues of the Studios' Motion Pictures. This

20 becomes obvious when one considers that the appearance of the CG character onscreen in the

21 Motion Pictures is not infringing. It is only the temporary copying of code from MOVA—one of

22 many software and other tools used in the movie-making process—that is alleged to be the act of

23 infringement.

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27 [12] *See* Costa Decl. ¶¶ 4–5; Conmy Decl. ¶ 5; LaSalle Decl. ¶ 8; Steele Decl. ¶ 5. The DD3
28 invoices include the cost of transportation, lodging, and other costs incidental to the use of the
software and face-capture services.

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2

A.   Rearden Cannot Show Causation Because Consumers Decide To See A Particular Movie For Innumerable Reasons

The Ninth Circuit holds plaintiffs to a substantial burden of presenting concrete, non-speculative evidence that the alleged infringement drove consumers' purchasing decisions. This requirement is fatal to Rearden's indirect profits claim because there are myriad reasons why consumers choose to see a movie.

Mackie (described above) and other cases are squarely on point. In *Mackie*, the court held that the plaintiff failed to establish a causal link between the infringing artwork and Symphony revenues because of the innumerable other reasons why consumers might buy Symphony tickets. Rejecting a claim similar to Rearden's here, the court found that the plaintiff's expert's opinion could not bridge the gap since the expert's analysis could not "determine how many of those individuals subscribed *because of*" the infringed artwork specifically. *Mackie*, 296 F.3d at 916. Because "the artwork was but one page in a multi-page brochure that advertised a series of concerts," the causal "thread" was too "attenuated" to connect purchasing decisions to the infringement; any such effort would be "[r]ank speculation." *Id*. *Mackie* controls here and is fatal to Plaintiffs' claim.

Polar Bear Productions likewise rejected an indirect profits claim because only speculation supported the plaintiff's causal nexus theory. In that case, Timex launched a promotional campaign for watches that used infringing footage from the plaintiff's video. *Polar Bear Prods.*, 384 F.3d at 714. The plaintiff claimed that Timex's display of the infringing materials at trade shows and in promotional materials generated excitement about Timex watches and "enhanced brand prestige" that "translated into consumers purchasing Timex's products" at other locations. *Id.* at 713–14. The jury delivered a verdict for the plaintiff. The Ninth Circuit, however, even under a highly deferential standard of appellate review, held that the plaintiff could not obtain profits from Timex. The court said there was no "evidence establish[ing] that the infringement may have actually influenced the purchasing decisions of those that bought [the infringer's] watches at retail stores or other outlets." *Id*. at 714–15. As in this case, "[a]ctual retail purchasers were never exposed to the infringing images." *Id*. at 715.

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1   Similarly, the Fourth Circuit in *Dash* rejected the plaintiff's attempt to establish a causal

2 nexus between music played during Floyd Mayweather's entrance into the ring at two wrestling

3 events and profits from videos of those events. *Dash*, 731 F.3d 303. Even though the infringing

4 content was used in the video and audible to consumers, the court found the infringing use

5 "form[ed] only a small, incidental portion" of the videos, and that it "defies credulity that a

6 consumer would purchase" the videos because of the infringing song. *Id.* at 332 (internal

7 quotation marks omitted).

8   The connection of the alleged infringement in *Mackie*, *Polar Bear Products*, and *Dash* and

9 the defendants' profits is far closer than the causal nexus Rearden is trying to establish here. In

10 each of those cases, the copyrighted work infringed was seen by, or could have been seen by,

11 some customers. That feature of those cases gave the plaintiffs a basis to argue that the

12 infringement conceivably could have influenced their purchasing decisions. The courts there

13 nevertheless rejected the indirect profits claims because the plaintiffs could only speculate that

14 exposure to the infringing material *caused* the purchasing decisions.

15   Here, MOVA is merely a software tool used as part of an involved creative process. *No*

16 *consumer sees the code that was copied into RAM or even the tracked mesh.* As in *Mackie*,

17 Rearden cannot offer non-speculative evidence of a causal nexus between the allegedly infringing

18 temporary copies of MOVA software code and revenue from the Motion Pictures. As with

19 symphonygoers in *Mackie*, there are countless reasons why a consumer might decide to see a

20 particular Motion Picture: for its story, its stars, its director, its music, or based on a friend's

21 recommendation, to name just a few.

22   The plaintiffs' indirect infringement claim in *Point 4 Data Corp. v. Tri-State Surgical*

23 *Supply & Equip., Ltd.*, No. 11 CV 726 (CBA) (RLM), 2012 WL 3306575, at *3 (E.D.N.Y. Aug.

24 13, 2012), is analogous to Rearden's claim. In that case, plaintiffs sought indirect profits as a

25 remedy for the defendant's violation of the anti-circumvention restrictions of the Digital

26 Millennium Copyright Act. The plaintiffs argued that they were entitled to profits from

27 defendant's medical supply business based on defendant's internal implementation and use of

28 plaintiffs' software for processing orders, invoices, financials, and inventories. The court rejected

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1   plaintiffs' claim to defendant's profits, explaining that the "profits were not generated through,"

2   for example, "selling the [at-issue] software," "but rather were the end result of [defendant's]

3   business of selling medical supplies to customers who apparently had no knowledge of or interest

4   in the brand of internal management software used at the company." *Id.* at *3. "[M]erely showing

5   that the software was an important tool" did not satisfy the plaintiffs' burden. *Id.* at *4.

6   **B.   Rearden Cannot Show Causation Because The Use Of The MOVA Software
                   Was A Preliminary Step In An Elaborate Process Of Creating A Motion
7   Picture**

8   Rearden cannot establish a causal nexus for a second reason: the temporary copies of the

9   MOVA software code were an irrelevant byproduct of the use of the software. Even the actual use

10   of the software made only a minute contribution to the completed Motion Pictures. That

11   contribution was dwarfed by innumerable other creative efforts, rendering Rearden's indirect

12   profits claim unduly speculative.

13   *Lowry's Reports, Inc. v. Legg Mason, Inc.*, 271 F. Supp. 2d 737 (D. Md. 2003), is

14   instructive on this point. The defendant, a financial services company, distributed infringing

15   copies of daily stock market reports to its analysts. The analysts used the copied reports in

16   formulating financial advice for clients and in making daily investment decisions. *Id*. at 751. The

17   court explained that the infringing copies were "never distributed" to customers and were

18   synthesized with "a variety of other information" used to produce the firm's profitable investment

19   analyses. *Id.* at 751–52 (alteration omitted). The court rejected the plaintiff's claim for revenues

20   derived from the defendant's financial advice (which it earned by advising investors, buying and

21   selling securities, and managing customer assets), because "[t]he complex, variable, independent

22   thought processes of hundreds of individual brokers intervene between the copying and any

23   subsequent gain." *Id.* at 752; *see also Orgel v. Clark Boardman Co.*, No. 92-2, 1960 WL 8025, at

24   *1 (S.D.N.Y. Nov. 29, 1960) (rejecting causation where plaintiff argued that defendant's copying

25   of law treatise enabled him to increase the profits from his law practice; "[t]he subject is too

26   remote and speculative to be susceptible of computation by a court").

27   Here, Rearden has asserted that "the CG character as it appears in the film is the product of

28   two processes: one to capture a live actor's facial performance in a lifelike manner, and the other

-17-

1   to create a CG model," and that because both processes make "important contributions," the

2   involvement of pieces of MOVA software code in the former satisfies the causal nexus

3   requirement.[13] Rearden's "contribution" theory overstates the significance of the temporary

4   copies of MOVA software code and understates the innumerable processes (far more than two)

5   that go into making the completed CG character (not to mention the full Motion Picture).

6   The creation of the temporary RAM copies was a byproduct of using the MOVA software.

7   The copies did not represent the output of the program or the recorded facial performance. The

8   software program itself only provided mathematical instructions for processing the captured

9   performance into output files representing facial motion through data points. And even the output

10   files consisted only of preliminary data, not anything that appeared in the completed Motion

11   Pictures. The other elements and contributions to the CG character were numerous and complex.

12   Ultimately, the role of the MOVA software was a small part of the work of the third-party vendor

13   (let alone of the finished Motion Picture) and was superseded by the further development of the

14   facial appearance and motion of the CG character.

15   **II.   REARDEN'S CAUSAL NEXUS THEORIES ARE BASED ON SPECULATION
         AND A MISUNDERSTANDING OF NINTH CIRCUIT LAW**

16

17   In its prior filings, Rearden previewed how it will seek to establish a causal nexus. None

     of its arguments satisfy its burden.

18

19   **A.   References To MOVA In Interviews And Articles Do Not Establish A Causal
              Nexus**

20   Rearden has argued that public statements in articles and YouTube videos of panel

21   discussions about the Motion Pictures establish that the alleged infringement was a "driver[] of

22   film attendance."[14] The snippets Rearden cites prove no such thing. The references to "MOVA"

23   that do exist are general references to the entire facial motion capture process, which is comprised

24   of a host of non-MOVA hardware and software tools and non-copyrightable processes. And the

25   articles and videos Rearden cites discuss numerous other elements of the Motion Pictures—which

26   confirms the futility of trying to show that MOVA drove consumer purchasing decisions.

27   _____

28   [13] Joint Letter Brief at 6.

     [14] Joint Letter Brief at 6.

MOTIONS FOR SUMMARY JUDGMENT
NOS. 17-CV-04006, 17-CV-04191

1   Rearden's showpiece example—a YouTube video of a "Paris Press Conference" featuring

2 the director and stars of *Beauty and the Beast*—proves these points. From this video, Rearden

3 pulled quotations of actors Dan Stevens and Emma Watson and of director Bill Condon as lead

4 examples in its complaint against Disney.[15] In the video, a reporter asks about motion capture

5 technology generally, and Dan Stevens mentions "MOVA" one time in his response. But the

6 three-minute discussion that ensues focuses on a range of topics having nothing to do with

7 MOVA, including the actors' skill in performing and in dealing with the challenging aspects of

8 incorporating special effects; the body capture; the fact that Mr. Stevens did both facial

9 performances and on-set walkthroughs of his action; and the fact that the producers built a

10 separate "Beast" character to which Emma Watson read some of her lines. Mr. Stevens's

11 reference to "MOVA" was a short-hand reference to the entire face capture process, and neither he

12 nor any other panelist said anything about MOVA software being responsible for the financial

13 success of the Movie. And the full video of this single press conference addressed numerous other

14 topics, including the actor Luke Evans's stage experience; the challenge of "bring[ing] a new

15 breath of fresh air to this classic and yet remain[ing] respectful to the original"[16]; and the music

16 and dancing in the Motion Picture.

17   The Paris Press Conference and the other articles and videos on which Rearden relies do

18 not so much as imply, never mind establish, any non-speculative connection between the narrow

19 infringement that Rearden alleges and the revenues it is trying to reach.

20   **B.   Rearden Cannot Base Its Claim On DD3's "Use" Of MOVA**

21   Rearden asserts that it can establish a causal nexus based on the fact that the Studios

22 "*used*" MOVA software "to capture an actor's performance, and then to process the captured

23 performance."[17] The theory fails, not only because of the minimal role that the use of MOVA

24 software played in the creation of the Motion Pictures, but also because Rearden is conflating the

25

26 [15] Dkt. 63 ¶ 2 (No. 17-cv-04006). The video is available at
https://www.youtube.com/watch?v=R9mKV_gklgw&feature=youtu.be&t=12m14s.

27 [16] Paris Press Conference, *Beauty and the Beast*, YouTube (Feb. 20, 2017)
https://www.youtube.com/watch?v=R9mKV_gklgw&feature=youtu.be&t=21m12s.

28 [17] Joint Letter Brief at 6.

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1   "use" of the entire MOVA system with the specific infringing act alleged (DD3's making

2   temporary copies of pieces of the MOVA software code in RAM). Rearden has no copyright

3   interest in the *use* of the MOVA system or even the use of the MOVA software code. The

4   Copyright Act is clear: "In no case does copyright protection . . . extend to any idea, procedure,

5   process, system, [or] method of operation." 17 U.S.C. § 102(b). In the context of computer

6   software, Section 102(b) "make[s] clear" that the particular form of "expression adopted by the

7   programmer is the copyrightable element in a computer program," but "the actual processes or

8   methods embodied in the program are not within the scope of copyright law." *Computer Assocs.*

9   *Int'l, Inc. v. Altai, Inc.*, 982 F.2d 693, 703 (2d Cir. 1992) (quoting H.R. Rep. No. 1476, 94th

10   Cong., 2d Sess. 54, *reprinted in* 1976 U.S.C.C.A.N. 5659, 5670); *cf. Apple Computer, Inc. v.*

11   *Microsoft Corp.*, 35 F.3d 1435, 1443 (9th Cir. 1994) ("Apple cannot" use copyright law to "get

12   patent-like protection for the *idea* of a graphical user interface").

13   The process embodied in software is the proper subject of patent rather than copyright

14   protection. 35 U.S.C. § 101 (a patent may be obtained for "any new and useful process"). But

15   patent law would likely limit Rearden's damages to the value of a "reasonable royalty"; and no

16   case law would support Rearden's patent-based claim to a portion of the ultimate profits of the

17   Movies. 35 U.S.C. § 284; *see LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51, 67

18   (Fed. Cir. 2012) (the "general rule" is that "royalties be based … on the 'smallest salable patent-

19   practicing unit'") (quoting *Cornell Univ. v. Hewlett-Packard Co.*, 609 F. Supp. 2d 279, 283, 287–

20   88 (N.D.N.Y. 2009)). Here, the available patent royalty would likely have been capped at the

21   amounts that the Studios paid DD3 for its special effects services. That is presumably why

22   Rearden chose to abandon its patent claims in this suit.[18]

23   Rearden is relying on the use of the process embodied in the MOVA software code to

24   make sweeping claims to Movie profits. But only Rearden's copyright claims remain live, and

25   those claims involve only the temporary copies of MOVA software code in computer RAM. If

26   Rearden can show copyright infringement, it may be entitled to the recovery of lost revenue

27   (measurable based on what Rearden charged customers for MOVA services, or vendors for a

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1 license), or to statutory damages under 17 U.S.C. § 504(c). But Rearden is not entitled to a

2 portion of the profits of the Motion Pictures based on DD3's use of MOVA. *See* Goldstein on

3 Copyright § 14.1.1.1 at 14:8, 14:12 (identifying "lost sales," "a reasonable royalty," or "market

4 value" as the appropriate measures of damages).

5   **C.   Ninth Circuit Law Does Not Allow Rearden To Skip To The Apportionment
              Stage**

6

7   Rearden's prior filings also argued that all of the elements besides the temporary RAM

8 copies of the software code are irrelevant to the causal nexus question, and instead are matters for

9 Defendants to prove in apportioning profits that are not attributable to the infringement.[19]

10   Rearden has the burdens backward. Section 504(b) "creates a two-step framework for

11 recovery of indirect profits: [first,] the copyright claimant must first show a causal nexus between

12 the infringement and the gross revenue; and [second,] once the causal nexus is shown, the

13 infringer bears the burden of apportioning the profits that were not the result of infringement."

14 *Polar Bear Prods.*, 384 F.3d at 711. Rearden must establish a causal nexus "*before* the parties can

15 wrangle about apportionment," *Mackie*, 296 F.3d at 915 (emphasis added), and must do so based

16 on concrete, non-speculative evidence, *id.*; 4 Nimmer on Copyright § 14.03[B][2][a]. The

17 contribution of countless elements other than the copies of MOVA software code to the completed

18 Motion Pictures and their revenues is fatal to Rearden's ability to establish the required causal

19 nexus. *See Mackie*, 296 F.3d at 916. Rearden's claims never get to the apportionment stage.

**III.   IN ADDITION TO BEING BASED ON SPECULATION, REARDEN'S INDIRECT
20   PROFIT CLAIMS FOR TRACK 1 MOTION PICTURES FAIL DUE TO THE DE
            MINIMIS (OR NONEXISTENT) APPEARANCE OF CG CHARACTERS WHOSE
21   DEVELOPMENT INVOLVED ANY USE OF MOVA**

22   These cases concern six Motion Pictures, each alleged to contain one CG character for

23 which there is alleged to have been some use of MOVA software. Summary judgment for lack of

24 causal nexus is warranted for all six Movies for the reasons stated above.

25

26

27 [18] Dkt. 93 (No. 17-cv-04006).

28 [19] *See* Joint Am. Case Mgmt. Stmt. at 8 (July 18, 2018), Dkt. 97 (No. 17-cv-04006), Dkt. 68 (No.
    17-cv-04191).

Rearden also cannot establish a causal nexus for the four Motion Pictures in the "Track 1" tier of discovery due to the de minimis or nonexistent use of MOVA.[20] They are (with one exception) in Track 1 because of the very small amount of time the characters in issue appear on screen. And, even then, MOVA tracked mesh data was not necessarily involved for all shots of a particular character.

In three Movies, the CG characters in issue appeared on screen for mere seconds:

- *Avengers: Age of Ultron* – The character "Thanos" appears only *in the closing credits* and for just over four seconds of the movie's 141 minutes. Costa Decl. ¶ 2.

- *Night at the Museum: Secret of the Tomb* – A talking bust of Augustus Caesar appears on screen for approximately 11 seconds of the movie's 98 minutes. Nash Decl. ¶ 4.

- *Guardians of the Galaxy* – The character Thanos appears on screen for 39 seconds of the movie's two hours. Costa Decl. ¶ 2.

In the other Track 1 Movie—*Fantastic Four*— the facial motion of the CG "Thing" character was not based on MOVA tracked mesh data. Ledda Decl. ¶ 4.[21]

In these Movies, not only are the temporary copies of MOVA software code and tracked mesh many creative steps removed from the ultimate character that appears on screen, but that character itself appears on screen only fleetingly (if at all). When "the infringing content forms only a small, incidental portion of the products that generated the claimed revenue streams," it "defies credulity that a consumer would" base purchasing decisions on that content. *Dash*, 731 F.3d at 332 (internal quotation marks omitted). The same can be said for *all* of the Motion

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[20] "Track 1" is intended to provide for narrow discovery and early mediation. Order Adopting Discovery Plan at 2–3, Dkt. 113 (No. 17-cv-04006), Dkt. 79 (No. 17-cv-04191).

[21] Rearden apparently filed a copyright claim based on Fantastic Four because the MOVA logo appears in the DVD/Blu-ray featurette. The Fox group responsible for the featurette had no involvement in the motion picture process. It appears the featurette included the MOVA logo because DD3 provided a third-party vendor that produced the featurette images of Jamie Bell that were not in fact used in connection with the CG character that appeared in the Movie. Mulvihill Decl. ¶¶ 2–7; Ledda Decl. ¶¶ 3–5.

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1   Pictures. Rearden's claims based on the Track 1 Movies simply demonstrates the extent of

2   Rearden's overreaching to seek a remedy that has no application to the facts of this case.

3   **CONCLUSION**

4   Rearden cannot proffer concrete, non-speculative evidence of a causal nexus between the

5   infringing temporary copies of MOVA software and any of its output—none of which was visible

6   in the Motion Pictures—and the revenues earned by the Motion Pictures. Even the *use* of the

7   MOVA software (which is not protected by Rearden's copyright interest) was a preliminary

8   process that was superseded by numerous artistic and technical efforts and innumerable hours of

9   additional work even to create a single CG character. For these and the other reasons set forth

10 above, Defendants respectfully request that the Court grant partial summary judgment on

11 Rearden's indirect profits claim.

12
    DATED: February 28, 2019   MUNGER, TOLLES & OLSON LLP
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15   By: */s/ Ginger D. Anders*
                                                      GINGER D. ANDERS
16
                                             Attorneys for Defendants
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